In the claims:

Claims 1-22 (Canceled)

23. (Original) A method of fabricating nanotube-based nanostructures by controlled deposition of nanotube segments comprising the steps of:

biasing a tip assembly bearing a carbon nanotube tip at a starting location on a substrate at a predetermined voltage;

scanning the tip assembly bearing a carbon nanotube tip along a predetermined path; and

applying a voltage pulse at a higher voltage than the predetermined voltage thereby disconnecting the nanotube tip from tip assembly and depositing a nanotube segment on the substrate.

24. (Original) The method of claim 23, wherein the nanotube tip is a single wall nanotube.

25. (Canceled)

26. (Previously presented) A method of producing nano-tweezers comprising at least two carbon nanotube tips, comprising the steps of:

providing a tip assembly;

applying at least two independent electrodes to the tip assembly; and

applying at least one carbon nanotube tip to each of the electrodes to produce a nanotweezer, wherein the spacing between respective end portions of the carbon nanotube tips changes in response to a voltage applied between the at least two electrodes; wherein applying the at least one carbon nanotube tip comprises the steps of :

applying metallic catalytic material to at least one electrode; and

inserting said at least one electrode into a CVD reactor; and

exposing said at least one electrode to a gaseous atmosphere comprising a carbon containing gas, thereby producing at least one electrode bearing a carbon nanotube tip.

27. (Previously presented) The method of claim 26, wherein the carbon nanotube tip is a single SWNT.

28. (Previously presented) The method of claim 26, wherein the carbon nanotube tip comprises a plurality of SWNTs.

29. (Previously presented) The method of claim 26, wherein the carbon nanotube tip is a MWNT.